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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,236	07/11/2003	Todd E. Kooken	LEE 200311	2856

27885 7590 03/22/2005

FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP  
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CLEVELAND, OH 44114

EXAMINER
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SHAW, CLIFFORD C

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <span style="float: right;">B</span>	Applicant(s) <span style="float: right;">H</span>	
	10/617,236	KOOKEN ET AL.	
	Examiner	Art Unit	
	Clifford C Shaw	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1126, 0711</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

*Re*

**Detailed Action**

1.) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.) Claims 24-27 and 30-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 24 and 30, line 1 of both claims, it is not clear what is meant by “an electric arc welding comprising”. In claim 30, line 3, there is no antecedent basis for the plural “said modules”; only a single antecedent module is mentioned. In claims 25-27 and 31-33, there is no antecedent basis for “a welder”.

3.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4.) Claims 1-5, 7, 8, 10, 11, and 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann (2,719,275) taken with Lisin et al. (4,338,657). Figure 1 of the patent to Hartmann (2,719,275) discloses a transformer with features claimed, including: parallel, concentric tubes labeled as “a”, joined as claimed; magnetic cores at “e”; jumper straps at “c”; nose at “I”; guide surface associated with the insulation between the tubes “a”. The claims differ in alluding a primary in the central tube passage, in calling for spiral formed tubes,

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and in calling for a center tap. These differences do not patentably distinguish over the prior art. Applicant's allusions to the tubes being able to accommodate a primary winding are considered to be representative of an intended use that does not structurally distinguish over the transformer of Hartmann (2,719,275), because applicant is not claiming the primary as a structural element and the structure of Hartmann (2,719,275) is capable of accommodating a primary winding inside of hollow tubes a1 and a2. However, insofar as the claim language calling for a primary can be considered structurally limiting, it would have been obvious to have placed the primary "f" in Hartmann (2,719,275) in any convenient location in lieu of that explicitly shown in Hartmann (2,719,275). In particular, it would have been obvious to have placed the primary in the central tube of Hartmann (2,719,275), the motivation being the teachings of Lisin et al. (4,338,657) that it is advantageous to position a primary winding in the central passage of stacked tubular cores in a transformer (see figure 3, element 11 in Lisin et al. (4,338,657)). In regard the claimed spiral tubes, it would have been obvious to have formed the tubes in Hartmann (2,719,275) in any conventional manner, including the use of a spiral approach as claimed. In regard to the claimed center tap, Hartmann (2,719,275) teaches the use of a center tap at the embodiment of figure 3, element g3. It would have been obvious to have provided the embodiment of figure 1 with a center tap, the motivation being to secure the well known advantages of the same, thereby satisfying the claims.

5.) Claims 6, 9, 12, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann (2,719,275) taken with Lisin et al. (4,338,657) as applied to claims 1-5, 7, 8, 10, 11, and 13-21 above, and further in view of Blankenship (5,351,175, cited by applicant). The

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only aspects of the claims to which the rejection above does not apply are: the provisions for rectifiers and the provision for limitations associated with an electric arc welder. These differences do not patentably distinguish over the prior art. The patent to Blankenship (5,351,175) teaches an electric arc power supply with an inverter feeding a transformer and in turn supplying rectifiers. At the time applicant's invention was made, it would have been obvious to have used any well known transformer structure in the system of Blankenship (5,351,175). In particular, it would have been obvious to have used the transformer structure taught by Hartmann (2,719,275) and Lisin et al. (4,338,657) as discussed above, the motivation being the teachings of Hartmann (2,719,275) that his transformer can advantageously be used with inverters (see column 1 of Hartmann (2,719,275)), thereby satisfying the claims.

6.) Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blankenship (5,351,175, cited by applicant). Figure 1 and the discussion thereof in the patent to Blankenship (5,351,175) disclose an electric arc welder with features claimed, including: a high frequency transformer at 20; plural secondary windings at 42 and 200; a primary at 22; an inverter associated with S1 and S2. The claims differ in calling for the transformer to include "modules" and in calling for particular current capacities. These differences do not patentably distinguish over the prior art. The term "module" does not have any specific structural meaning that would distinguish over the two secondary windings in Blankenship (5,351,175). It is considered obvious that these separate windings are in some sense "modules" because they are distinct entities. In regard to the claimed current capacities, it is considered obvious that the

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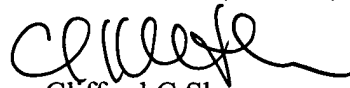
system of Blankenship (5,351,175) be configured for any arbitrary welding situation, which could obviously include the current levels claimed.

7.) The patent to Kerns (2,600,057) is cited to show a prior art transformer structure that includes stacked tubular cores.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

March 18, 2005